Amendments to the Specification

Please replace the ABSTRACT of the specification with the following amended ABSTRACT:

The invention relates to a method of segmenting an image of a structure stored as a set of spatially related data points representing variations in a predetermined parameter, said method comprising the steps of selecting a seed point within the structure to be segmented, assigning to each of the data points a value of connectivity indicative of the confidence that respective areas of the data points are part of the same structure as said seed point, said value of connectivity including a function of the distance of the respective point from said seed point, establishing a threshold value for said level of connectivity and selecting for display data points meeting said threshold value.

Please replace paragraph [0074] of the application as published, with the following replacement paragraph:

In FIG. 16 there is shown a flow chart that depicts the automatic threshold setting process steps. The sequences of steps performed is indicated by the sequence of blocks 272 to 282. In block 272 the process inputs data-set 28 for processing. At block 274 the user sets, using user interface 24, the expected volume of the structure under consideration and at block 276 the connectivity threshold. At block 278 the connectivity level of the voxels is computed, using the algorithm shown in FIG. 4, then in block 280 the volume is computed by calculating the number of voxels which have a connectivity level above the set threshold. Finally, at block 282, computed volume and expected volume are compared to see if they are equal, if the computed volume is bigger, then at block [[272]] 276 the threshold is set to a higher value but if the computed volume is smaller, then at block [[272]] 276 the block is set to a lower value. It should be noted that instead of comparing to see if the computed and expected volumes are equal, they could be compared to see if their difference is within a certain acceptable margin.

2